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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,766	06/21/2001	Masaru Watanabe	MOR-C077	6429

30132 7590 10/10/2002

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EXAMINER

VALENCIA, DANIEL E

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 10/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,766

Applicant(s)

WATANABE ET AL.

Examiner

Daniel E Valencia

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification ^(title) is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Inventorship

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 2, 3, 4, 7 and 8 rejected under 35 U.S.C. 102(a) as being anticipated by
Yoshida Japanese Patent No. JP 10339822 A. Refer to the appropriate drawings or parts of the

translated specification. Yoshida discloses an optical fiber for amplification with all of the limitations of the abovementioned claims. Regarding claims 1 and 3, Yoshida discloses an optical attenuator in the form of a single mode optical fiber (drawing 1) comprising a core (2) containing a dopant which attenuates (paragraph 24-26) transmitted light more when its wavelength is longer (drawing 5), said dopant being contained only in a dopant area being limited to a center portion of the core (paragraph 2-5), said core having a refractive index at the center portion greater than the peripheral portion of said core (drawing 6b). Yoshida further discloses that the distribution of the of the refractive index takes the from of square wave shapes as mentioned by instant claims 2, 4, and 8. Referring to claim 7, Yoshida also discloses that the core can be doped instead with a dopant that attenuates shorter wavelengths (paragraph 22 and drawing 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Morishita Japanese Patent No. JP 11264908 A. Refer to the appropriate drawings or parts of the translated specification. Yoshida as applied above, discloses an optical fiber for amplification with a majority of the limitations of the present invention; however, the reference fails to teach doping of a peripheral part of the core.

On the other hand, Morishita discloses an optical attenuator that teaches the limitation that the Yoshida reference lacks. Regarding claims 5 and 9, Morishita discloses an optical attenuator in the form of a single mode optical fiber (drawing 1-5) comprising a core containing, in a dopant area, dopant which attenuates transmitted light when its wavelength is longer (paragraph 8) (or shorter, depending on the dopant being used), (also see drawing 2) wherein the dopant area is limited to a peripheral part of the core (paragraph 10-11) and having a refractive index at the center part of said core greater than that of the peripheral part of said core. Morishita teaches that it is advantageous to use different dopants to dope the inner and outer cores of an optical fiber (paragraph 15 and 16 and drawing 2), in order to control the magnitude of attenuation of particular wavelengths. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fiber attenuator disclosed in Yoshida, to contain different doping combinations and concentrations disclosed in Morishita.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rosenberger U.S. Patent No. 3,843,229 discloses an optical waveguide having a graded refractive index core formed of silicon and germanium.

Loeb U.S. Patent No. 6,134,366 discloses a reduced dispersion optical waveguide and methods for fabricating the same.

Desurvire U.S. Patent No. 5,892,876 discloses an optical fiber including a fluorescent dopant.

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Aiso U.S. Patent No. 6,055,353 discloses an optical fiber for optical amplification.

Espindola U.S. Patent No. 6,151,438 discloses a fiber device having variable refractive index region proximal the core.

Imoto U.S. Patent No. 5,570,448 discloses a rare earth element doped multiple core optical fiber.

Tirlioni U.S. Patent No. 6,321,016 discloses an optical fiber having low non-linearity for WDM transmission.

Fotheringham U.S. 5,013,131 discloses a single mode optical fiber and process for its production.

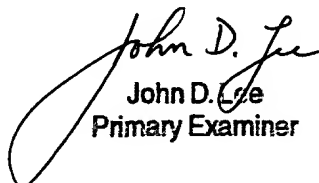
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel E Valencia whose telephone number is (703)-305-4399. The examiner can normally be reached on Monday-Friday 9:30-6:00.

The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-7724 for regular communications and (703)-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

DV

Dan Valencia
October 4, 2002


John D. Lee
Primary Examiner